

Author Index

- Agabian, N., see Michaeli, S. (51) 55
 Aikawa, M., see Sim, B.K.L. (51) 157
 Aisien, S.O., Walter, R.D., Polyamine *N*-acetyltransferase from *Fasciola hepatica* (51) 65
 Aizenstein, B.D., see Reinitz, D.M. (51) 119
 Alagón, A., see Michel, B. (51) 165
 Alonso, C., see Requena, J.M. (51) 271
 Armes, L.G., see Pratt, D. (51) 209
- Bailey, M., see Gibson W. (51) 189
 Barreto-Bergter, E., Vermelho, A.B., Hartmann, R., Pohlentz, G., Klein, R.A., Egge, H., Structural characterization of neutral glycosphingolipids from *Trypanosoma cruzi* (51) 263
 Beecroft, R.P., see Kardami, E. (51) 171
 Beverley, S.M., see LeBowitz, J.H. (51) 321
 Blanton, R.E., Licate, L.S., Developmental regulation of protein synthesis in schistosomes (51) 201
 Boisvenue, R.J., see Pratt, D. (51) 209
 Boothroyd, J.C., see Sibley, L.D. (51) 291
 Bruchhaus, I., see Komuniecki, R. (51) 331
- Chung, S.C., see Webster, P.J. (51) 169
 Cohen, S.J., see Klotz, F.W. (51) 49
 Cooper, J.A., Cooper, L.T., Saul, A.J., Mapping of the region predominantly recognized by antibodies to the *Plasmodium falciparum* merozoite surface antigen MSA 1 (51) 301
 Cooper, L.T., see Cooper, J.A. (51) 301
 Cox, G.N., see Pratt, D. (51) 209
 Cruz, A., see LeBowitz, J.H. (51) 321
- Dame, J.B., see Zarlenga, D.S. (51) 281
 Doenhoff, M.J., see Moser, D. (51) 229
 Dolan, S.A., see Walker-Jonah, A. (51) 313
 Donelson, J.E., see Erondy, N.E. (51) 111
 Donelson, J.E., see Engman, D.M. (51) 153
- Ebeling, S.B., see Van Eys, G.J.J.M. (51) 133
 Edwards, M.R., see Schofield, P.J. (51) 29
 Egge, H., see Barreto-Bergter, E. (51) 263
 Engman, D.M., Fehr, S.C., Donelson, J.E., Specific functional domains of mitochondrial hsp70s suggested by sequence comparison of the trypanosome and yeast proteins (*Short Communication*) (51) 153
 Erondy, N.E., Donelson, J.E., Differential expression of two mRNAs from a single gene encoding an HMGI-like DNA binding protein of African trypanosomes (51) 111
- Fairlamb, A.H., see Komuniecki, R. (51) 331
 Fandrich, R.R., see Kardami, E. (51) 171
 Fehr, S.C., see Engman, D.M. (51) 153
 Fried, M., Mencher, D., Sar-Shalom, O., Wallach, M., Developmental gene expression of a 230-kilodalton macrogamete-specific protein of the avian coccidial parasite, *Eimeria maxima* (51) 251
- Garside, L., see Gibson W. (51) 189
 Gibson, W., Garside, L., Bailey, M., Trisomy and chromosome size changes in hybrid trypanosomes from a genetic cross between *Trypanosoma brucei rhodesiense* and *T. b. brucei* (51) 189
 Glaser, T.A., Mukkada, A.J., Proline transport in *Leishmania donovani* amastigotes: dependence on pH gradients and membrane potential (51) 1
- Glaser, T.A., Utz, G.L., Mukkada, A.J., The plasma membrane electrical gradient (membrane potential) in *Leishmania donovani* promastigotes and amastigotes (51) 9
 Gobright, E., see Nene, V. (51) 17
 Gwadz, R.W., see Walker-Jonah, A. (51) 313
- Hageman, R., see Pratt, D. (51) 209
 Haghighat, N.G., Ruben, L., Purification of novel calcium binding proteins from *Trypanosoma brucei*: properties of 22-24- and 38-kilodalton proteins (51) 99
 Hartmann, R., see Barreto-Bergter, E. (51) 263
 Haynes, J.D., see Klotz, F.W. (51) 49
 Haynes, J.D., see Sim, B.K.L. (51) 157
 Horemans, A.M.C., Tielens, A.G.M., Van den Bergh, S.G., The reversible effect of glucose on the energy metabolism of *Schistosoma mansoni* cercariae and schistosomula (51) 73
 Howard, R.F., The sequence of the p82 rhoptry protein is highly conserved among *Plasmodium falciparum* isolates (*Short Communication*) (51) 327
 Howard, R.J., see Klotz, F.W. (51) 49
- Iams, K.P., see Nene, V. (51) 17
 Ilg, T., see Komuniecki, R. (51) 331
 Inselburg, J., Lee, S., An examination of the mitomycin C induction of chromosome polymorphisms in cultures of *Plasmodium falciparum* (51) 183
- Jimenez-Ruiz, A., see Requena, J.M. (51) 271
 Johnson, K.R., Komuniecki, R., Sun, Y., Wheelock, M.J., Characterization of cDNA clones for the alpha subunit of pyruvate dehydrogenase from *Ascaris suum* (51) 37
 Jongwutiwes, S., Tanabe, K., Nakazawa, S., Yanagi, T., Kanbara, H., Sequence variation in the tripeptide repeats and T cell epitopes in P190 (MSA-1) of *Plasmodium falciparum* from field isolates (51) 81
- Kanbara, H., see Jongwutiwes, S. (51) 81
 Kardami, E., Pearson, T.W., Beecroft, R.P., Fandrich, R.R., Identification of basic fibroblast growth factor-like proteins in African trypanosomes and *Leishmania* (51) 171
 Klein, R.A., see Barreto-Bergter, E. (51) 263
 Klinkert, M.-Q., see Moser, D. (51) 229
 Klotz, F.W., Orlandi, P.A., Reuter, G., Cohen, S.J., Haynes, J.D., Schauer, R., Howard, R.J., Palese, P., Miller, L.H., Binding of *Plasmodium falciparum* 175-kilodalton erythrocyte binding antigen and invasion of murine erythrocytes requires *N*-acetylneuraminic acid but not its *O*-acetylated form (51) 49
 Komuniecki, R., Bruchhaus, I., Ilg, T., Wilson, K., Zhang, Y., Fairlamb, A.H., Purification of glutathione reductase from muscle of the adult parasitic nematode, *Ascaris suum* (*Short Communication*) (51) 331
 Komuniecki, R., see Johnson, K.R. (51) 37
 Krieger, J.N., see Riley, D.E. (51) 161
 Kroon, N.C.M., see van Eys, G.J.J.M. (51) 133
- LeBowitz, J.H., Cruz, A., Beverley, S.M., Thymidine kinase as a negative selectable marker in *Leishmania major* (*Short Communication*) (51) 321
 Lee, S., see Inselburg, J. (51) 183
 Licate, L.S., see Blanton, R.E. (51) 201
 Lizardi, P.M., see Michel, B. (51) 165
 Lopez, M.C., see Requena, J.M. (51) 271

- Mansfield, J.M., see Reinitz, D.M. (51) 119
 Mansour, T.E., see Webster, P.J. (51) 169
 Matthews, J., see Schofield, P.J. (51) 29
 McKerrow, J.H., see Ray, C. (51) 239
 Mencher, D., see Fried, M. (51) 251
 Michaeli, S., Podell, D., Agabian, N., Ullu, E., The 7S1 RNA homologue of *Trypanosoma brucei* is closely related to mammalian 7SL RNA (51) 55
 Michel, B., Alagón, A., Lizardi, P.M., Zurita, M., Characterization of a repetitive DNA element from *Entamoeba histolytica* (Short Communication) (51) 165
 Miller, L.H., see Klotz, F.W. (51) 49
 Moser, D., Doenhoff, M.J., Klinkert, M.-Q., A stage-specific calcium-binding protein expressed in eggs of *Schistosoma mansoni* (51) 229
 Mowatt, M.R., see Nash, T.E. (51) 219
 Mukkada, A.J., see Glaser, T.A. (51) 2
 Mukkada, A.J., see Glaser, T.A. (51) 9
 Müller, S., see Shukla, O.P. (51) 91
 Musoke, A.J., see Nene, V. (51) 17

 Nakazawa, S., see Jongwutiwes, S. (51) 81
 Nash, T.E., Mowatt, M.R., Characterization of a *Giardia lamblia* variant-specific surface protein (VSP) gene from isolate GS/M and estimation of the VSP gene repertoire size (51) 219
 Nelsons, R.G., see Rosenthal, P.J. (51) 143
 Nene, V., Iams, K.P., Gobright, E., Musoke, A.J., Characterisation of the gene encoding a candidate vaccine antigen of *Theileria parva* sporozoites (51) 17

 Orlandi, P.A., see Klotz, F.W. (51) 49

 Palese, P., see Klotz, F.W. (51) 49
 Panton, L.J., see Walker-Jonah, A. (51) 313
 Pearson, T.W., see Kardami, E. (51) 171
 Podell, D., see Michaeli, S. (51) 55
 Pohlentz, G., see Barreto-Bergter, E. (51) 263
 Pratt, D., Armes, L.G., Hageman, R., Reynolds, V., Boisvenue, R.J., Cox, G.N., Cloning and sequence comparisons of four distinct cysteine proteases expressed by *Haemonchus contortus* adult worms (51) 209

 Ray, C., McKerrow, J.H., Gut-specific and developmental expression of a *Caenorhabditis elegans* cysteine protease gene (51) 239
 Reinitz, D.M., Aizenstein, B.D., Mansfield, J.M., Variable and conserved structural elements of trypanosome variant surface glycoproteins (51) 119
 Requena, J.M., Jimenez-Ruiz, A., Soto, M., Lopez, M.C., Alonso, C., Characterization of a highly repeated interspersed DNA sequence of *Trypanosoma cruzi*: its potential use in diagnosis and strain classification (51) 271
 Reuter, G., see Klotz, F.W. (51) 49
 Reynolds, V., see Pratt, D. (51) 209
 Riley, D.E., Krieger, J.N., Rapid and practical DNA-isolation from *Trichomonas vaginalis* and other nucleic-acid-rich protozoa (Short Communication) (51) 161
 Rosenthal, P.J., Nelson, R.G., Isolation and characterization of a cysteine proteinase gene of *Plasmodium falciparum* (51) 143

 Ruben, L., see Haghighat, N.G. (51) 99

 Sar-Shalom, O., see Fried, M. (51) 251
 Saul, A.J., see Cooper, J.A. (51) 301
 Schauer, R., see Klotz, F.W. (51) 49
 Schofield, P.J., Edwards, M.R., Matthews, J., Wilson, J.R., The pathway of arginine catabolism in *Giardia intestinalis* (51) 29
 Schoone, G.J., see van Eys, G.J.J.M. (51) 133
 Seta, K.A., see Webster, P.J. (51) 169
 Shukla, O.P., Müller, S., Walter, R.D., Polyamine oxidase from *Acanthamoeba culbertsoni* specific for *N*⁸-acetylspermidine (51) 91
 Sibley, L.D., Boothroyd, J.C., Construction of a molecular karyotype for *Toxoplasma gondii* (51) 291
 Sim, B.K.L., Toyoshima, T., Haynes, J.D., Aikawa, M., Localization of the 175-kilodalton erythrocyte binding antigen in micronemes of *Plasmodium falciparum* merozoites (Short Communication) (51) 157
 Soto, M., see Requena, J.M. (51) 271
 Sun, Y., see Johnson, K.R. (51) 37

 Tanabe, K., see Jongwutiwes, S. (51) 81
 Tielens, A.G.M., see Horemans, A.M.C. (51) 73
 Toyoshima, T., see Sim, B.K.L. (51) 157

 Ullu, E., see Michaeli, S. (51) 55
 Utz, G.L., see Glaser, T.A. (51) 9

 van den Bergh, S.G., see Horemans, A.M.C. (51) 73
 van Eys, G.J.J.M., Schoone, G.J., Kroon, N.C.M., Ebeling, S.B., Sequence analysis of small subunit ribosomal RNA genes and its use for detection and identification of *Leishmania* parasites (51) 133
 Vermelho, A.B., see Barreto-Bergter, E. (51) 263

 Walker-Jonah, A., Dolan, S.A., Gwadz, R.W., Panton, L.J., Wellems, T.E., An RFLP map of the *Plasmodium falciparum* genome, recombination rates and favored linkage groups in a genetic cross (51) 313
 Wallach, M., see Fried, M. (51) 251
 Walter, R.D., see Shukla, O.P. (51) 91
 Walter, R.D., see Aisien, S.O. (51) 65
 Webster, P.J., Seta, K.A., Chung, S.C., Mansour, T.E., A cDNA encoding an α -tubulin from *Schistosoma mansoni* (Short Communication) (51) 169
 Wellems, T.E., see Walker-Jonah, A. (51) 313
 Wheelock, M.J., see Johnson, K.R. (51) 37
 Wilson, J.R., see Schofield, P.J. (51) 29
 Wilson, K., see Komuniecki, R. (51) 331
 Yanagi, T., see Jongwutiwes, S. (51) 81

 Zarlenga, D.S., Dame, J.B., The identification and characterization of a break within the large subunit ribosomal RNA of *Trichinella spiralis*: comparison of gap sequences within the genus (51) 281
 Zhang, Y., see Komuniecki, R. (51) 331
 Zurita, M., see Michel, B. (51) 165

Subject Index

- Acanthamoeba* (51) 161
Acanthamoeba culbertsoni (51) 91
 Actin (51) 201
 Aerobic/anaerobic transition (51) 73
 African trypanosomes (51) 111
 Amastigote (51) 1, 9
 Annexin (51) 99
 Antigenic variation (51) 219
 Arginine deiminase (51) 29
 Arginine dihydrolase pathway (51) 29
 Arginine metabolism (51) 29
Ascaris suum (51) 37

 Basic fibroblast growth factor (51) 171

Caenorhabditis elegans (51) 239
 Calcium-binding protein (51) 99, 229
 Calmodulin (51) 99
 Carbamate kinase (51) 29
 Ceramide dihexoside (51) 263
 Ceramide monohexoside (51) 263
 Chromosome (51) 189
 Chromosome polymorphism (51) 183
 Chromosome separation (51) 291
 Cysteine protease (51) 239
 Cysteine protease, cDNA cloning (51) 209
 Cysteine-rich protein (51) 219

 Diamine (51) 65
 Diaminopropane (51) 91
 Diethyl pyrocarbonate (51) 161
 DNA (51) 161
 DNA amplification (51) 271
 DNA sequence (51) 165, 251
 DNA-binding protein (51) 111

 East Coast fever (51) 17
 Elongation factor 1 (51) 201
 Energy metabolism (51) 73
Entamoeba histolytica (51) 165
 Epitope (51) 301
 Epitope mapping (51) 119
 Erythrocyte binding antigen (51) 157
 Expansion segments (51) 281

Fasciola hepatica (51) 65
 Favoured linkage group (51) 313
 Field isolate (51) 81
 Fusion protein (51) 17

 Gap excision (51) 281
 Gene cloning (51) 281
 Gene expression (51) 17
 Gene regulation (51) 201
 Genetic exchange (51) 189
 Genetics (51) 291
 Genome heterogeneity (51) 271
 Genome mapping (51) 291
Giardia intestinalis (51) 29
Giardia lamblia (51) 219
 Glycolysis (51) 73
 Glycosphingolipid (51) 263

 Gut development (51) 239

 Haemoglobin (51) 143
Haemonchus contortus (51) 209
 Heat shock (51) 201
 HMGI-like protein (51) 111
 HSP 70 (51) 201

 Identification (51) 133
 Immunoblotting (51) 171
 Immunolocalisation (51) 171
 Immunoreactive egg antigen (51) 229
 In situ hybridisation (51) 251
 Ionophore (51) 1

 Lactate production (51) 73
Leishmania (51) 133
Leishmania donovani (51) 1, 9, 171

 Malaria (51) 143
 Membrane potential (51) 9
 Merozoite (51) 49, 157, 301
 Microneme (51) 157
 Mitomycin C (51) 183
 Molecular cloning (51) 37
 Molecular karyotype (51) 291

N-Acetylspermidine (51) 91
N-Acetylation (51) 65
 Nucleotide sequence (51) 209, 229

 Octamer sequence motif (51) 111
 Ornithine transcarbamoylase (51) 29

 Papain (51) 143
 Parasitic helminth (51) 239
 Plasma membrane ATPase (51) 1
Plasmodium falciparum (51) 49, 81, 143, 157, 183, 301, 313
 Point mutation (51) 133
 Polyadenylation (51) 111
 Polyamine (51) 65
 Polyamine oxidase (51) 91
 Polymerase chain reaction (51) 133
 Polymorphism (51) 81
 Processing (51) 301
 Proline transport (51) 1
 Promastigote (51) 1, 9
 Protease (51) 301
 Protein conformation (51) 119
 Protein synthesis (51) 201
 Proteinase (51) 143
 Proton motive force (51) 1
 Pulsed-field gel electrophoresis (51) 291
 Pyrimethamine resistance (51) 183
 Pyruvate dehydrogenase complex (51) 37

 Receptor (51) 49
 Recombination rate (51) 313
 Red cell (51) 49
 Repetitive DNA (51) 165
 Repetitive sequence (51) 271
 RFLP map (51) 313

Ribosomal DNA (51) 281
Ribosomal RNA (51) 133, 281
7SL RNA (51) 55
rRNA processing (51) 281

Schistosoma mansoni (51) 73, 169, 229
Sialic acid (51) 49
Signal recognition particle (51) 55
Sporozoite antigen (51) 17
Structure (51) 263

T cell epitope (51) 81
Taxonomy (51) 271 *Theileria parva* (51) 17
Toxoplasma gondii (51) 291
Transformation (51) 73, 201
Trichinella spiralis (51) 281

Trichinellosis (51) 281
Trichomonas vaginalis (51) 161
Tripeptide repeats (51) 81
Trisomy (51) 189
Triton X-100 (51) 161
Trypanosoma (51) 55, 119, 189
Trypanosoma brucei (51) 99, 189
Trypanosoma brucei rhodesiense (51) 171
Trypanosoma cruzi (51) 263, 271
 α -Tubulin gene (51) 169

Vaccine (51) 17
Variant surface glycoprotein (51) 119

Wall-forming bodies (51) 251

